

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
22 March 2001 (22.03.2001)

PCT

(10) International Publication Number
WO 01/20491 A2

(51) International Patent Classification⁷: G06F 17/30

(74) Agent: MANNING, Gavin, N.: Oyen Wiggs Green & Matala, 480 - 601 West Cordova Street, Vancouver, British Columbia V6B 1G1 (CA).

(21) International Application Number: PCT/CA00/01057

(22) International Filing Date:
13 September 2000 (13.09.2000)

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/395,732 14 September 1999 (14.09.1999) US

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US 09/395,732 (CIP)
Filed on 14 September 1999 (14.09.1999)

Published:

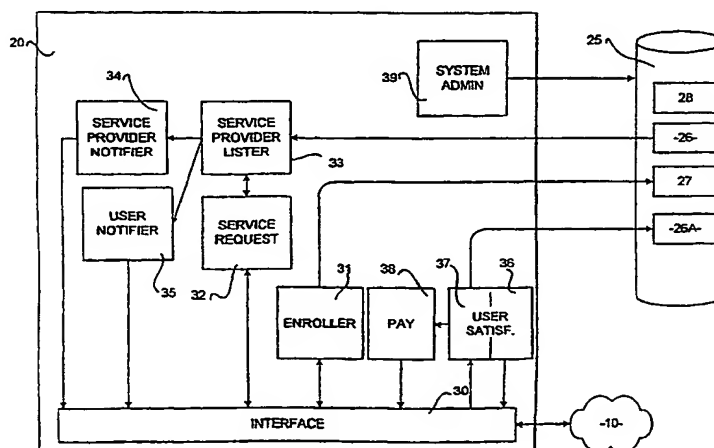
— Without international search report and to be republished upon receipt of that report.

(71) Applicant and

(72) Inventor: CHRIST, Michael, A. [CA/CA]; 404 - 518 13th Street, New Westminster, British Columbia V3M 4L9 (CA).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SYSTEM AND METHOD FOR BROKERING RATED SERVICES



(57) Abstract: A system for brokering contracts for the provision of services by service providers to users includes a server (20) connected to a communication network (10). In response to requests for referrals to service providers the system generates referrals (212) to service providers (43, 45, 47). After a period of time has elapsed, the system automatically generates and sends to users who have been referred to service providers requests (218) for user satisfaction information (220). The user satisfaction information (220) relates to users levels of satisfaction with services provided by the service provider. The users are paid for providing the user satisfaction information (220). The system provides broadly based, reliable information regarding general levels of user satisfaction with specific service providers. Such information may be provided to prospective customers for use in selecting a service provider. Such information may also be provided to service providers for use in improving their service performance. Demographic and other information regarding users of the system may also be used to direct advertising of interest to users.

WO 01/20491 A2

SYSTEM AND METHOD FOR BROKERING RATED SERVICES

Field of the Invention

5 This invention relates to computer implemented methods and computer systems for providing consumers with access to, and information regarding, businesses or "service providers" who provide services in a wide range of fields.

Background of the Invention

10 Consumers have difficulty in evaluating the reputation of service providers. Reviews of restaurants and hotels are commonplace. However, if a consumer wishes to hire a roofer, mechanic, plumber, gardener, lawyer, cleaner, engineer, tutor, music teacher, graphic artist, electronics repairer, consultant, accountant or other service provider, the consumer often has great difficulty in finding information useful for evaluating the different service providers who may be available. Sometimes a consumer may be lucky enough to obtain a word of
15 mouth referral. However, word of mouth referrals are not always available and do not allow for the fact that different consumers may have varying experiences with the same service provider. There is in stark contrast to the state of affairs in product manufacturing where product reviews and comparisons are widely available in newspapers, magazines, television programs and Internet web sites.

20 Some service providers hire marketing research companies to gauge their customers' levels of satisfaction with their services. Such surveys are usually of no benefit to the consumer. Their results are typically kept for internal use and seldom released to the public. Furthermore, the service performance of a large organization may vary significantly between different local geographical areas. Large scale consumer reporting agencies typically lack the
25 resources to conduct evaluations of the millions of local service providers throughout North America. Local agencies such as local chapters of the Better Business Bureau typically only provide information about the complaint histories of member businesses.

The advent of the Internet has provided many opportunities for electronic commerce. Various online business directories allow potential consumers of goods and services to
30 connect with businesses capable of providing such goods and services. One factor which interferes with the acceptance of electronic commerce is that consumers have no way to assess the credibility of service providers who they contact on-line. A consumer who contacts

a service provider over a computer network typically has no information other than information provided by the service provider which can be used in evaluating whether the service provider will likely provide competent services in a timely fashion and at a reasonable cost.

5 Like business directories which are distributed in other media, Internet business directories derive most of their revenues from advertisers. The more advertisers linked to a web site, the more financially successful the site. Most online directories and virtual shopping malls listing retail stores and services have therefore adopted a business model which encourages listing as many businesses as possible with the largest, most expensive,
10 advertising presence that each service provider can afford. For obvious reasons, this business model is not compatible with providing realistic, trustworthy performance ratings to consumers.

 Existing systems for connecting users to service providers are also not optimal from the perspectives of the service providers. Most small service providers lack the resources and
15 skills needed to track or predict consumer needs. Therefore service providers often lack information that would enable them to provide better service to their customers.

 Some providers of goods on the Internet permit Internet users to post comments regarding the goods being offered for sale. For example, the book-selling web site Amazon.com includes a facility which permits users to post "reviews" of books which are
20 offered for sale on the site. A disadvantage of this system is that there is no control over who posts book reviews. A reader cannot tell whether the review was posted by a reader or by the book's author. Further, the vast majority of readers do not bother to post reviews of books that they have read.

 There is a need for a system which can provide users with reliable information
25 regarding the reputation of service providers. There is also a need for an inexpensive system for providing small and large service providers with feedback regarding their customer satisfaction levels.

Summary of the Invention

30 This invention provides a system for brokering services provided by multiple service providers. This system facilitates the creation of an unbiased collection of reports regarding

the performance of individual service providers by automatically providing a questionnaire to users who have been referred to service providers. By completing and returning the questionnaire the users can express their levels of satisfaction with any services provided by the service providers. When users return the questionnaires the system pays the users. The collection of reports regarding the performance of service providers can be provided to the service providers themselves for use as a tool in the evaluation and improvement of their services. The collection of reports can also be accessed by users for assistance in determining whether to retain the services of a particular service provider.

One embodiment of the invention provides a computer implemented method for operating a service brokerage. The method comprises implementing in a computer the steps of: receiving contact information from a user by way of a communication network; receiving a request for a service from the user by way of the communication network; transmitting to the user on the communication network information identifying one or more service providers capable of providing the service; after a time interval, automatically forwarding to the user on the communication network a request for user satisfaction information; receiving user satisfaction information from the user on the communication network; and, after receipt of the user satisfaction information issuing payment to the user. In a variation of the invention, transmitting to the user on the communication network information identifying one or more service providers capable of providing the service is replaced or augmented by transmitting to the one or more service providers contact information for the user from the database. The communication network may be a data communication network, such as the Internet or a telephone network. All that is necessary is that the communication network allows a user to exchange information with the computer on which the method is being performed.

Another aspect of the invention provides a method for operating a service brokerage. This method comprises providing a database containing records relating to a plurality of service providers; receiving a request from a user, the request identifying a service required by the user, searching the database to locate one or more service providers capable of providing the service required by the user; forwarding to the user information from the database identifying the one or more service providers; requesting and receiving from the user a rating of a service provided to the user by one of the one or more service providers; and, following receipt of the rating from the user, providing a payment to the user. The payment to

the user ensures that a large proportion of users will provide user satisfaction information regarding service providers that they have received services from. In a variation of the invention, forwarding to the user information from the database identifying the one or more service providers is replaced or augmented by forwarding to the one or more service providers contact information for the user from the database.

Yet another aspect of the invention provides apparatus providing a computer implemented service brokerage. The apparatus comprises means for receiving from a user a request for a service over a communication network; means for identifying a group of one or more service providers able to provide the service; means for forwarding to the user on the communication network a list of service providers in the group of service providers; means for automatically generating and sending on the communication network to the user a request for user satisfaction information; means for receiving user satisfaction information from the user on the communication network; and, means for automatically issuing a payment to the user in response to the receipt of the user satisfaction information. In a variation of the invention the means for forwarding to the user on the communication network a list of service providers in the group of service providers is replaced or augmented by a means for forwarding contact information for the user to the service providers on the list of service providers.

It can be appreciated that the invention may be used to provide users with access to a broad horizontal market of rated service providers. The service providers may include providers of virtually any kinds of service including: professionals such as lawyers, accountants, patent agents, audiologists, speech therapists and the like; trades such as plumbers, builders, roofers, dry-wallers, carpenters, machinists, appliance service technicians, painters and the like; and other service providers such as automobile brokers, stock brokers, house cleaners, gardeners, pet attendants, chauffeurs, babysitters and the like.

Further aspects, advantages and inventive features of the invention are described below.

Brief Description of the Drawings

In drawings which illustrate non-limiting embodiments of the invention,

Figure 1 is a schematic diagram illustrating a computer network on which the invention may be practiced;

Figure 2 is an illustration of a possible web interface for use in the invention;

Figure 3 is a block diagram illustrating functional components of computer server software which may be used for practicing the invention;

Figure 4 is a flowchart illustrating a method for operating a service brokerage according to the invention;

Figure 5 is an example web page that might be used by a user to define the user's service requirement; and,

Figure 6 is an example of a possible web page containing a service satisfaction questionnaire.

Description

This invention provides a system for brokering services provided by a plurality of businesses or "service providers". The system provides potential consumers of services with an opportunity to select a service provider with reference to the service provider's capabilities, availability, price and references provided by the service provider and other consumers. The system provides payment to consumers who provide reviews of the services that they have received through the system. This enables the system to provide consumers with a trustworthy, source of information regarding the performance and reputation of the various service providers.

This invention is preferably implemented by providing a server capable of generating voice, e-mail and fax messages and serving web pages. Most preferably the server is also connected to a speech synthesis / speech recognition system which permits the server to receive information delivered orally by users who call the server by telephone. The server may comprise one or more computers connected to a network. The configuration of web servers is now well understood to those skilled in the art. The information required to configure a server to provide the functions specified below is thoroughly described in the computer literature. Configuring servers to provide such functions is now a matter of routine skill and will therefore not be described in detail in this specification.

As shown in Figure 1, the invention may be practiced on a computer network 10 which is accessible to a plurality of user computers 22. A server 20 connected to network 10 is in bi-directional electronic communication with user computers 22. Figure 2 shows a functional diagram of server 20. Server 20 may comprise a computer system running suitable server software 21. It is convenient for server 20 to be a web server and for user computers 22 to run web browser software, such as Microsoft TM Explorer TM, so that user computers 22 can request, receive over network 10, and display, web pages which are generated by server 20.

Server 20 has access to a database 25. The term "database" in this specification means a memory or other storage location into which information can be stored and later retrieved by server 20 in an organized manner. While it is preferable to implement database 25 with the use of commercially available database software such as ORACLETM or Microsoft SQL Server TM, this is not necessary. Database 25 may comprise a single integrated database or may comprise a number of separate databases.

Database 25 contains records 26 which identify service providers who can provide services of various kinds in one or more local geographical areas. Records 26 include information specifying the types of service available for each service provider and the geographical areas within which the service provider is capable of providing such services. Service providers may pay the operator of server 20 to have a listing in server 20 and to receive referrals of users. There may be separate databases 25 and/or servers 20 covering different geographical areas. In the alternative, a single server 20 may have access one or more databases containing records of service providers capable of providing services in two or more local geographical areas.

A potential consumer of services can cause their computer 22 to connect to server 20 by, for example, navigating to a home page hosted on server 20 with web browser software running on computer 22. Server 20 provides an interface 30 to network 10, and/or other communication networks, and a facility 31 for allowing new users to enrol with server 20. Facility 31 receives contact information for the user from user computer 22 via network 10. The contact information specifies at least one way of contacting the user. The connection between user computer 22 and server 20 should be a secure connection, at least when personal and/or financial information is being transmitted between user computer 22 and server 20.

The contact information includes a network address for the user's computer 22 and information which indicates the local geographical area in which the user is located. Preferably the contact information includes at least the user's name, post-office address, e-mail address and telephone number. Facility 31 stores the contact information in a user record 27 within database 25.

Server 20 comprises a facility 32 for receiving service requests from user computers 22 of enrolled users. Facility 32 provides the user with an opportunity to specify a service that the user requires. Facility 32 preferably permits the user to specify the nature of the service required, the time frame within which the service is required, any financial limitations on the cost of the services and the geographical area in which the service is required. The geographical location of the user may be determined from the user's zip code or postal code.

Facility 32 can determine the nature of the service required by a user by providing a list of available services for display on the user's computer 22 and receiving from the user's computer 22 a signal indicating a particular service selected by the user. The list of available services may be generated by querying database 25 for services indicated as being available in the user's geographical area by at least one service provider record 26. The list may be provided to the user by, for example, delivering a web page on network 10 for viewing on the user's computer 22. Interface 30 and facility 32 provide a means for receiving from a user a request for a service over communication network 10.

If a large variety of different services are available to users of server 20 then facility 32 may facilitate the user's task of selecting a required service by grouping the available services into broad classes, such as: professional services; home maintenance services; business services; entertainment services; automotive services; recreational services; computer services; consulting services; electronic services; and so on. After selecting a class of services the user could view a list of the individual services available in the class or, if there are a large number of services a class the user could be provided with a list of several subclasses, each containing several types of available services. The user may then select the required service. Server 20 may also provide a search function to enable users to directly locate a particular service that can be requested by way of server 20.

Preferably facility 32 of server 20 provides the user with an opportunity to make notes of any special requirements. This may be done by forwarding to user computer 22 a web page

comprising a form to be completed by the user and then receiving from the user's computer 22 the information provided by the user. Special requirements might include, for example, a date by which the services must be started or completed, or any other special requirements that the user might have.

5 Most preferably server 20 includes a telephone connection 50 equipped with a speech recognition / speech synthesis system and/or menu-selection software in which a user can select from among a number of options by pressing keys on a telephone keypad. Connection 50 is connected to interface 30. A user may use any telephone to call connection 50 and to communicate with server 20 in place of a user computer 22. A user can interact with server 10 20 via telephone connection 50 by speaking and/or pushing telephone buttons in response to voice prompts provided by server 20. Speech recognition systems suitable for use in a telephone connection 50 are commercially available. The design and construction of speech recognition systems is outside of the ambit of this invention and will not be discussed in any detail here. A user can use server 20 by connecting to telephone connection 50 from a 15 telephone 52 by way of a wired or wireless telephone network 51 even if it is not convenient for the user to access a computer 22. Where a telephone connection 50 is provided, a user can enrol with server 20 and subsequently submit service requests by providing the information described above from any telephone 52 via telephone connection 50.

 Server 20 comprises a facility 33 for identifying service providers capable of 20 providing the service requested by the user. After server 20 receives a request for a specific service from a user then facility 33 queries database 25 to locate records 26 for one or more service providers who may be able to provide the required service at the user's location. Facility 33 and database 25 provide a means for identifying a group of one or more service providers able to provide the service required by the user.

25 Server 20 comprises a service provider notification facility 34. Facility 34 notifies the service provider that it has received a request for services of the type provided by the service provider. This is preferably done by electronically communicating via network 10 with a computer 43 of the service provider. For example, facility 34 may comprise software which automatically generates and sends an electronic mail message to an address identified in the 30 service provider's record 26 each time facility 33 identifies the service provider as a possible provider of a service requested by a user. The electronic mail message preferably includes

contact information for the user from the user's record 27 in database 25. The contact information preferably includes the user's e-mail address and/or telephone number.

If the service provider does not have a computer 43 connected to network 10 then facility 34 could automatically generate and send through a fax machine 44 connected to server 20 a fax message to a fax machine 45 of the service provider. The fax message indicating that there is a user who is a potential customer for the service provider's services. In the alternative, facility 34 could cause a speech synthesis system 46 to initiate a telephone connection to a telephone 47 of the service provider and deliver a speech synthesized spoken message to the service provider indicating that there is a potential customer for the service provider's services and providing contact information which allows the service provider to contact the potential customer.

Server 20 also comprises a facility 35 for communicating to the user the identities of one or more service providers capable of providing the service identified by facility 33. Facility 35 preferably prepares and forwards to the user's computer 22 for display a list of available service providers capable of providing the service identified by facility 33. The list preferably includes contact information such as the telephone number, e-mail address, and/or postal address for each service provider on the list. Facility 35 and interface 30 provide a means for forwarding a list of service providers to the user on communication network 10.

In addition to the identities of service providers, database 25 contains user satisfaction information relating to each of the service providers represented in database 25. The user satisfaction information is information provided by previous customers of those service providers. The user satisfaction information is preferably included as records 26A in database 25. Facility 35 preferably permits a user to retrieve and display on their computer 22 the user satisfaction information, or a summary of the user satisfaction information, for those service providers identified by facility 33 in response to the user's service request. The user may use such user satisfaction information in selecting a service provider to provide the needed service. The user can then contract with the selected service provider to perform the required services.

The inventor contemplates that most users will prefer to have server 20 automatically notify qualifying service providers of their service requirements rather than using server 20 as a business directory and making the effort to initiate contact with service providers

themselves. Preferably server 20 allows users to select a preferred one of the one or more service providers listed by facility 35. In response to such a selection server 20 automatically causes facility 34 to notify the selected service provider that the user has asked to be contacted by the service provider. The notification may be delivered to the selected service provider in any of the various ways described above.

In the alternative to receiving information regarding service providers on computer 22, an enrolled user could dial in to telephone connection 50, enter a password, and access user satisfaction information through telephone connection 50.

Server 20 comprises a user satisfaction assessment facility 36. After server 20 has provided a user with a referral to one or more service providers, facility 36 automatically follows up, after a suitable time interval, by sending the user a questionnaire. Facility 36 may also or, in the alternative, send the user a link to a questionnaire hosted on server 20. Most preferably the questionnaire or link is sent to the user's computer 22 by electronic mail to a network address included in the contact information in the record 27 for the user. The questionnaire requests from the user a rating of the service, if any, provided to the user by the service provider. Facility 36 and interface 30 provide a means for automatically generating and sending on communication network 10 a request for user satisfaction information.

Replies to the questionnaire are received by server 20 by way of network 10. After server 20 receives a completed questionnaire from a consumer then the information from the completed questionnaire is extracted by a data extraction facility 37 of server 20 and added to database 25 in the record 26A for the service provider. Interface 30 and facility 37 provide a means for receiving user satisfaction information.

After server 20 receives a questionnaire completed by a consumer then the consumer is paid to compensate the consumer for their time and effort expended in considering and replying to the questions on the questionnaire. This is done by a payment facility 38. Payment facility 38 may operate in any of several modes to issue payments to a user. Upon receipt of a completed questionnaire, payment facility 38 may automatically print a check which can be delivered to the consumer by mail. In the alternative, if the consumer is capable of accepting payment electronically then payment facility 38 may automatically generate an electronic payment to the consumer. The payment provided by payment facility 38 preferably comprises consideration selected from the group consisting of: money, consideration directly convertible

to money, electronic currency, and a credit toward the purchase of subsequent services. Payment facility 38 provides a means for automatically issuing payment to the user.

Instead of paying each user immediately for completing a questionnaire, server 20 may pay a user who completes a questionnaire by applying a credit to an account maintained for the user by server 20. The account could be, for example, a record in database 25. Periodically, for example every 6 months or annually, server 20 could generate and deliver dividend payments, either in the form of money or in some other form, to users who have positive balances in their accounts. The amount of the dividend payment to each user would be based upon the balance in each user's account and, optionally, on a share of the revenues realized by the operators of server 20 for the period in question.

It can be appreciated that the apparatus and methods of the invention facilitate the creation of an unbiased, reliable record of the performance of service providers. Because consumers are paid to provide reviews of the service that they have received, it is not only the angry or idle consumers who can afford to take the time to respond to the questionnaire. Furthermore, even small service providers who could not afford to retain a polling agency to take customer satisfaction surveys receive continuous feedback on the services that they are providing so that they can adjust their manners of doing business to maximize consumer satisfaction. The operators of server 20 could also generate reports comparing performance of two or more business locations operated by the same service provider or comparing the performance of the service provider with the performance of competitors of the service provider.

Optionally, server 20 could keep records of the types of service requested by each user. Such records and information provided by the consumer upon enrolling with server 20 provide a profile of each user. With the user's permission, the operators of server 20 could provide the user's contact information to advertisers offering goods or services likely to be of interest to the user. On the basis of the profile, and with the user's permission, the operators of server 20 could select advertising for delivery to the user and forward the selected advertising to the user using the user's contact information in record 27.

The various facilities which are described above may be provided by a single integrated software program running on a computer or may be provided by separate software programs running on a single computer or multiple computers. The apparatus of the invention

may comprise a computer running database software and active web server software. The computer having access to a number of web pages which provide forms for receiving and sending information as required in practicing the invention as described herein.

Figure 3 is a flowchart which illustrates a method 100 according to one embodiment of the invention. Figure 4 is a diagram illustrating the exchange of information between server 20 user computer 22 and a service provider when the method of Figure 3 is performed.

A user has access to a computer 22 connected to network 10 but has not yet enroled with server 20. The user is in need of a service. For example, the user has a leaking water faucet and requires a plumber to fix the faucet. The user first causes computer 22 to connect to server 20 (step 102). This may involve, for example, navigating to a web home page hosted on server 20 using a web browser software running on computer 22. The user enrolls with server 20 (step 104). Enrolment involves server 20 receiving from computer 22 at least some contact information about the user and creating a record 27 for the user in database 25. Server 20 may receive contact information, for example, by providing a web page 200 on server 20. The web page 200 provides a form for requesting information from new users of server 20.

Contact information 202 is returned to server 20. Preferably new users are assigned, or are permitted to choose, a unique user name and are prompted to provide a password. The user name and password may be stored in user record 27 and used to confirm the identity of the user when the user accesses server 20 in future.

If users are to be charged a fee for the use of server 20 then form 200 may request entry of a credit card number or other payment information. After the user's computer 22 forwards to server 20 the information 202 required of new users then server 20 creates a record 27 of the new user in database 25. Preferably server 20 also forwards a "cookie" 204 for storage in the user's computer 22 (step 106). As is well known to those skilled in the art, a cookie is a file containing information sufficient for server 20 to identify the new user in the future. When a computer 22 of a user who has previously enroled with server 20 connects to server 20, server 20 may recognize "cookie" 204 and prompt the user for only the user's password.

After a user has enroled with server 20, upon a request 206 from a user computer 22, server 20 permits a user to select an available service which is of interest to the user. The selection step may be performed in any of several different ways. For example, server 20 may

provide: a) a search function which permits a user to search for services by service type; b) a search function which permits a user to search for a specific service provider by its trade name; c) a search function which allows the user to describe a problem and the server to suggest service providers who may be capable of addressing the problem (for example, a user might request "I need a will prepared" and server 20 would respond with a list of lawyers practicing in the area of wills and estates or the user might request " My toilet is plugged up" and server 20 would respond with a list of plumbers who handle household emergencies); and/or d) a series of menus which allow users to access alphabetical listings of services by class and subclass. A user may access one or more of these mechanisms through a service selection page 208 which receives from the user and forwards to server 20 selection information 210.

Figure 5 shows one possible service selection page 208. Web page 208 contains a form 300 which includes a section 301 which allows a user to select an available service. Section 301 has a number of categories 302. Each category 302 has a pull down list 304 which lists specific services within the category. The categories could, for example, be things such as "REPAIRS", "ADVICE", "BUILDING AND RENOVATIONS", "CLEANING", "DESIGNING", "LESSONS", and so on. Form 300 includes a logo 305 of the operator of server 20. Form 300 has a text field 306 in which a user can supply a more specific description of the required services. Text field 306 may contain a context-sensitive template which can be filled in with information specific to the type of service requested. For example, if the user selects an appliance repair service in section 301 then text field 306 may contain a template (not shown) which requests that the user provide a description of the appliance which needs repairing. The template might, for example include blanks for the user to fill in a general description of the appliance, the make and model, the year of manufacture, the serial number, and, generally, what seems to be the matter with the appliance. Form 300 includes a section 308 which allows a user to specify how urgently the service is required as well as any limitations on the days and times when the service should be provided. Section 310 of form 300 allows the user to specify where the service is to be provided. If the user selects the user's own address by selecting a radio button 312 A then address fields 314 are automatically filled in with the user's address from database 25. If database 25 contains a separate service address for the user then the user may select that service address by selecting radio button 312B. The

user can specify that the services will be performed at the service provider's premises by selecting radio button 312C. The user can specify a different address by selecting radio button 312D. Form, 300 also includes a section 318 containing contact information for the user. The contact information in section 318 can initially be filled in from the information about the user in database 25. The user can supply different contact information for the specific service being requested, by changing the information in section 318 if desired. After form 300 has been filled in then the user can submit form 300 by clicking on submit button 320.

From the user's input 210 in the selection step, server 20 identifies a specific service in which the user is interested (step 108). Server 20 queries database 25 (step 110) to obtain a list 212 of one or more service providers who are capable of providing the requested service in the geographical area of the user. Preferably server 20 identifies the user's geographical area from the record of user information in database 25. The user should be permitted to specify an alternative geographical area in which a service is required. A user will not always require services at the same location. For example, a user may require services at a vacation cottage which is in a different geographical area from the user's home. The user might also require services while travelling.

Upon identifying records 26 corresponding to one or more service providers server 20 automatically notifies the selected service providers by delivering a message 214 indicating that the user may be interested in retaining their services and including contact information for the user (step 114A) and forwards to the user's computer 22 information 212 about the service provider, including contact information for the service provider (step 114B) from the service provider's record 26 in database 25. Steps 114A and 114B may be performed in any order. After steps 114A and 114B have been completed, both the user and at least one service provider have contact information for each other. While it is not preferred, one of steps 114A and 114B could be left out without departing from the broad scope of the invention. It is only necessary that either the user or one or more service providers receive contact information for the other.

Step 114A may involve, for example, automatically generating an electronic mail message 214 which includes the user's e-mail address and/or telephone number and sending the electronic mail message 214 to the service provider's computer 43 over network 10, automatically generating a facsimile memorandum and sending that memorandum to the

service provider by way of a fax machine 44 connected to server 20 or connecting to the service provider by telephone and delivering a message to the service provider by way of a speech synthesizer 46 connected to server 20. Step 114B may involve, for example, displaying a web page 212 on a display of computer 22, automatically generating a fax message and sending the fax message to a fax machine of the user (not shown) or dialling a telephone number of the user and delivering a speech synthesized voice message to the user.

Web page 212 lists contact information from database 25 regarding the selected service provider(s). In step 114B server 20 permits the user to access records 26A which contain information 216 about historical levels of customer satisfaction with the service provider as reported by previous users who have obtained services from the service provider. The user can consider such information in deciding whether to retain the services of a particular service provider. Server 20 keeps in database 25 a record 28 of each referral of a user to a service provider (step 114C).

The user may then contact the service provider directly (or the service provider may contact the user directly) and arrange for the required services to be performed (step 116). A few days or weeks after referring a user to a service provider, server 20 automatically generates and forwards to the user (step 118) a request 218 for user satisfaction information which specifies the user's level of satisfaction with the services (if any) performed for the user by the service provider. Step 118 may involve, for example, searching database 25 for records 28 of referrals made 8 days previously and automatically generating and sending to the e-mail address (as stored in the user's record 27 in database 25) of each user to whom such a referral was made an electronic mail message containing (or containing a hyperlink to) a questionnaire 218 to be completed by the user. The user is encouraged to complete and return the questionnaire 218 because the user will be paid for doing so. Preferably questionnaire 218 comprises a number of questions which can be answered in a way such that the answers may be compiled automatically by software running on server 20. For example, the questionnaire may include such questions as: "On a scale of 1 to 5, 1 being the poorest performance and 5 being the best performance, please rate the {insert type of services} services recently provided to you by {insert name of service provider} in respect of each of: promptness, craftsmanship, presentation, neat appearance ..." and so on.

Figure 6 is an example of a possible questionnaire 218 in the form of a web page.

Questionnaire 218 includes a form 400 which has a set of radio buttons 408 which a user can use to indicate whether the service has been completed, cancelled or postponed. If the user indicates that the service has been postponed then server 20 will forward a new questionnaire 218 after a suitable time period. If a service has been provided to the user then the user answers the remaining questions on form 400. Form 400 has a field 410 in which the user can select from a drop down list the name of a service provider who provided a service to the user, a field 412 for entering the date on which the service was provided or completed, a field 414 in which the user can enter the number of the service provider's invoice for services and a field 416 in which the user can specify the total amount of the invoice for the services.

Form 400 includes a section 420 which includes a number of questions 421.

Questions 421 are intended to solicit the user's opinion on how the service provider's performance measured up in a number of aspects relating to good customer service. In response to each question the user assesses the service provider's performance on a scale of 1 to 5, where 1 is the lowest performance level and 5 is the highest performance level.

Questions 421 may be in the form of statements with which the user can express agreement or disagreement. Each question 421 is accompanied by a set of radio buttons 422. The user can select the one of radio buttons 422 which corresponds most closely to their answer to the question. The questions may, for example, ask the user to indicate levels of agreement or disagreement with statements about the service provider's performance level such as:

The service provider:

- a) returned calls promptly;
- b) did not keep me waiting;
- c) offered a clear proposal or estimate;
- d) completed work quickly and efficiently;
- e) was understanding and knowledgeable;
- f) kept me informed of progress;
- g) was caring and considerate;
- h) staff, equipment and facilities appeared clean and professional;
- i) did the job correctly the first time;
- j) provided quality workmanship;

- k) billed so that the final cost agreed with the estimate provided;
- l) provided good value for money;
- m) impressed me enough that I would hire the same service provider again.

Form 400 also includes a text field 426 into which the user can insert additional
5 comments about the service provided. A user can submit form 400 by clicking on submit
button 428. Form 400 may optionally include a section which permits users to complete a
statement like "I was unhappy with the service provided but would be willing to allow the
service provider to remedy the situation by {suggest solution}". Form 400 may also
optionally include questions about the user's level of satisfaction with the operation of server
10 20.

If the user chooses to communicate with server 20 by telephone instead of by way of
computer 22 then questionnaire 218 could be administered to the user by telephone. This
could be done, for example, by programming server 20 to automatically initiate a telephone
call to the user some time after the user has been referred to a service provider and, after
15 confirming the identity of the user, generating questions of questionnaire 218 with a speech
synthesizer. The user could respond to the questions either by pressing buttons on the
telephone key pad or by providing spoken answers which are converted into a computer
readable form by a speech recognition system.

Preferably server 20 receives the user's answers 220 to the questionnaire 218 and
20 automatically incorporates the user's answers 220 into the record 26A for the service provider
from which the user purchased services (step 120). Record 26A may, for example, contain a
running average of numerical ratings provided by users in each of several categories. Upon
receipt of the user's answers 220 to the questionnaire 218 server 20 automatically generates a
signal (step 122) requesting that the user be paid for providing the user's answers. Step 122
25 may involve generating a list of payments to be made manually. Preferably, step 122 involves
server 20 automatically generating and delivering to the user something of value 222. For
example, step 122 may involve server 20 printing a check to be mailed to the user on a printer
23; server 20 could automatically generate a credit card credit directed to the user's credit
card account; server 20 could maintain an account containing "points" that the user could
30 exchange for goods or services, and so on. In any event, the user receives (step 124) valuable

consideration for having provided complete user satisfaction information 220 in response to the questionnaire 218.

The methods of the invention may involve any of various financial arrangements between the operators of server 20 and service providers and between users and the operators of server 20. For example, service providers could pay a fixed rate for inclusion in database 25 for a period of time, service providers could pay a fixed fee for each referral generated by server 20, service providers could pay a fee calculated as a percentage of the amount billed to users referred by server 20. Service providers could also pay fees for reports which compare service records of different locations of the same service provider or compare service records of the service provider to service records of others on a local, regional or national basis.

Users could pay a fee to enrol with server 20 or could be allowed to enrol with server 20 at no cost. Users could be paid a fixed, but significant amount of money, or other valuable consideration for completing questionnaires 218 or users could be paid a percentage of the value of the services purchased from a service provider for completing questionnaires 218. If users are to be paid an amount which depends upon the amount paid for services received, or if the operators of server 20 are to be paid an amount which depends upon the amount paid for services then the service providers must forward to server 20 and server 20 must receive, payment information 216 (step 117) so that the amount of consideration 222 to be paid to the user (or the operators of server 20) can be calculated by server 20. Server 20 may automatically generate and send to the service provider a request for such payment information after each referral to the service provider. Payment information 216 may also, or in the alternative, be received in response to a question on questionnaire 218.

Server 20 may provide users with the option of having payments directed to charity instead of to them personally. High income users, in particular, may be more highly motivated to provide user satisfaction information 220 in order to cause funds to be directed to a charity than they would be motivated by a rebate of, for example, 10%.

The charity may be a charity of the user's choice, a charity selected by one or more service providers, or the like. It may be convenient to have a charitable foundation to which any donations of payments are made. The charitable foundation could, in turn, disburse funds to charities as selected by users and /or service providers.

For administrative simplicity payments to users could be issued annually. System 20 could generate for forwarding to each user a simple annual summary. The summary could include a cheque for any payments owing to the user and a tax receipt for any charitable donations made on the user's behalf.

5 As will be apparent to those skilled in the art in the light of the foregoing disclosure, many alterations and modifications are possible in the practice of this invention without departing from the spirit or scope thereof. For example, while the implementation of the invention described above use Internet web pages to provide an interface to users, other protocols which allow interaction with users of a computer network could be used in the
10 alternative. The appearance and arrangement of web pages and forms may be varied without departing from the invention. Information can be exchanged with a user by using speech synthesis and speech recognition systems instead of via the Internet. Accordingly, the scope of the invention is to be construed in accordance with the substance defined by the following claims.

I Claim:

1. A computer implemented method for operating a service brokerage, the method comprising implementing in a computer the steps of:
 - a) receiving contact information from a user by way of a communication network;
 - b) receiving a request for a service from the user by way of the communication network;
 - c) identifying one or more service providers capable of providing the service;
 - d) generating and sending by way of the communication network a message including contact information sufficient to enable direct communication between the user and the service provider;
 - e) after a time interval, automatically forwarding to the user on the communication network a request for user satisfaction information;
 - f) receiving user satisfaction information from the user on the communication network; and,
 - g) following receipt of the user satisfaction information issuing payment to the user.
2. The method of claim 1 wherein generating and sending by way of the communication network a message including contact information sufficient to enable direct communication between the user and the service provider comprises transmitting to the one or more identified service providers on the communication network contact information for the user.
3. The method of claim 2 wherein transmitting the contact information to the service provider comprises generating an e-mail message and directing the e-mail message to the service provider on the communication network.
4. The method of claim 2 wherein transmitting the contact information to the service provider comprises generating a fax message and automatically sending the fax message to a fax number of the service provider.

- 5
- 6.
- 10
- 15
- 20
- 25
- 30
5. The method of claim 2 wherein transmitting the contact information to the service provider comprises making a telephone connection to a telephone number of the service provider and causing a speech synthesizer to deliver the contact information via the telephone connection.
 6. The method of claim 1 wherein generating and sending by way of the communication network a message including contact information sufficient to enable direct communication between the user and the service provider comprises transmitting to the user on the communication network contact information for the one or more identified service providers.
 7. The method of claim 1 wherein generating and sending by way of the communication network a message including contact information sufficient to enable direct communication between the user and the service provider comprises transmitting to the user on the communication network contact information for the one or more identified service providers and transmitting to the one or more identified service providers on the communication network contact information for the user.
 8. The method of claim 1 wherein receiving a request for a service comprises receiving an incoming telephone call from a user, connecting the incoming telephone call to a speech recognition system, using the speech recognition system to generate a computer readable request identifying a user and a service required by the user, and passing the computer readable request to a server computer.
 9. The method of claim 8 wherein identifying one or more service providers capable of providing the service comprises using the identification of the user to retrieve from a database information identifying a geographical region of the user and querying the database for service providers capable of providing the service required in the geographical region of the user.

10. The method of claim 9 wherein generating and sending by way of the communication network a message including contact information sufficient to enable direct communication between the user and the service provider comprises causing a speech synthesizer to deliver a spoken message identifying the one or more service providers to the user via a telephone connection.
- 5
11. The method of claim 1 comprising receiving from the service provider information specifying a price paid for the service by the user wherein issuing payment to the user comprises calculating a payment amount by computing a percentage of the price paid for the service and paying the payment amount to the user.
- 10
12. The method of claim 1 wherein issuing payment to the user comprises paying the user consideration selected from the group consisting of: money, consideration directly convertible to money, electronic currency, and a credit toward the purchase of subsequent services.
- 15
13. The method of claim 1 wherein issuing payment to the user comprises printing a check payable to the user.
- 20
14. The method of claim 1 wherein issuing payment to the user comprises generating a credit to a credit card account of the user and electronically forwarding the credit to a credit card issuer responsible for the credit card account.
- 25
15. The method of claim 1 wherein at least one financial account is associated with the user and issuing payment to the user comprises depositing value into the account by performing at least one electronic financial transaction.
- 30
16. The method of claim 1 wherein the contact information comprises an e-mail address for the user and forwarding the request for user satisfaction information comprises generating and sending to the e-mail address and e-mail message.

17. The method of claim 1 comprising generating a profile of a user by recording information about requests for services made by the user, on the basis of the profile, selecting advertising for delivery to the user and forwarding the selected advertising to the user.
- 5
18. A method for operating a service brokerage, the method comprising the steps of:
- a) providing a database containing records relating to a plurality of service providers;
 - b) upon request by a user identifying a service required by the user, searching the database to locate one or more service providers capable of providing the service required by the user;
 - c) forwarding to the user information from the database identifying the one or more service providers;
 - d) requesting and receiving from the user a rating of a service provided to the user by one of the one or more service providers; and,
 - e) following receipt of the rating from the user, providing a payment to the user.
- 10
- 15
19. A method for operating a service brokerage, the method comprising the steps of:
- a) providing a database containing records relating to a plurality of service providers;
 - b) upon request by a user identifying a service required by the user, and a geographical area in which the service is required; and searching the database to locate one or more service providers capable of providing the service required by the user;
 - c) forwarding to one or more of the service providers information the database identifying the user;
 - d) requesting and receiving from the user a rating of a service provided to the user by one of the one or more service providers; and,
 - e) following receipt of the rating from the user, providing a payment to the user.
- 20
- 25
- 30

20. Apparatus providing a computer implemented service brokerage, the apparatus comprising:

- a) means for receiving from a user a request for a service over a communication network;
- b) means for identifying a group of one or more service providers able to provide the service;
- c) means for forwarding to the user on the communication network a list of one or more service providers in the group of service providers;
- d) means for automatically generating and sending on the communication network to the user a request for user satisfaction information;
- e) means for receiving user satisfaction information from the user on the communication network; and,
- f) means for automatically issuing a payment to the user in response to the receipt of the user satisfaction information.

21. The apparatus of claim 20 wherein the means for identifying one or more service providers comprises a database and a facility for querying the database in response to the request for service.

1/6

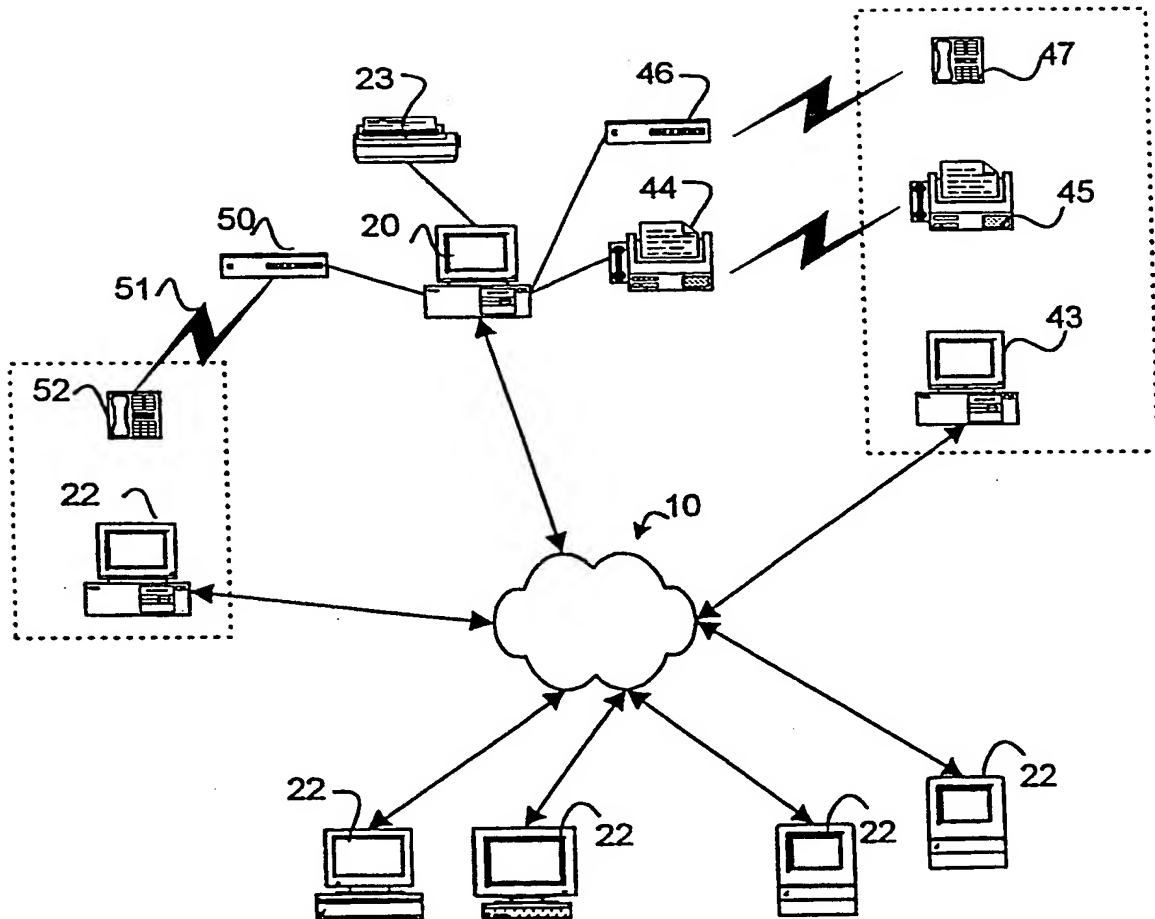


FIG. 1

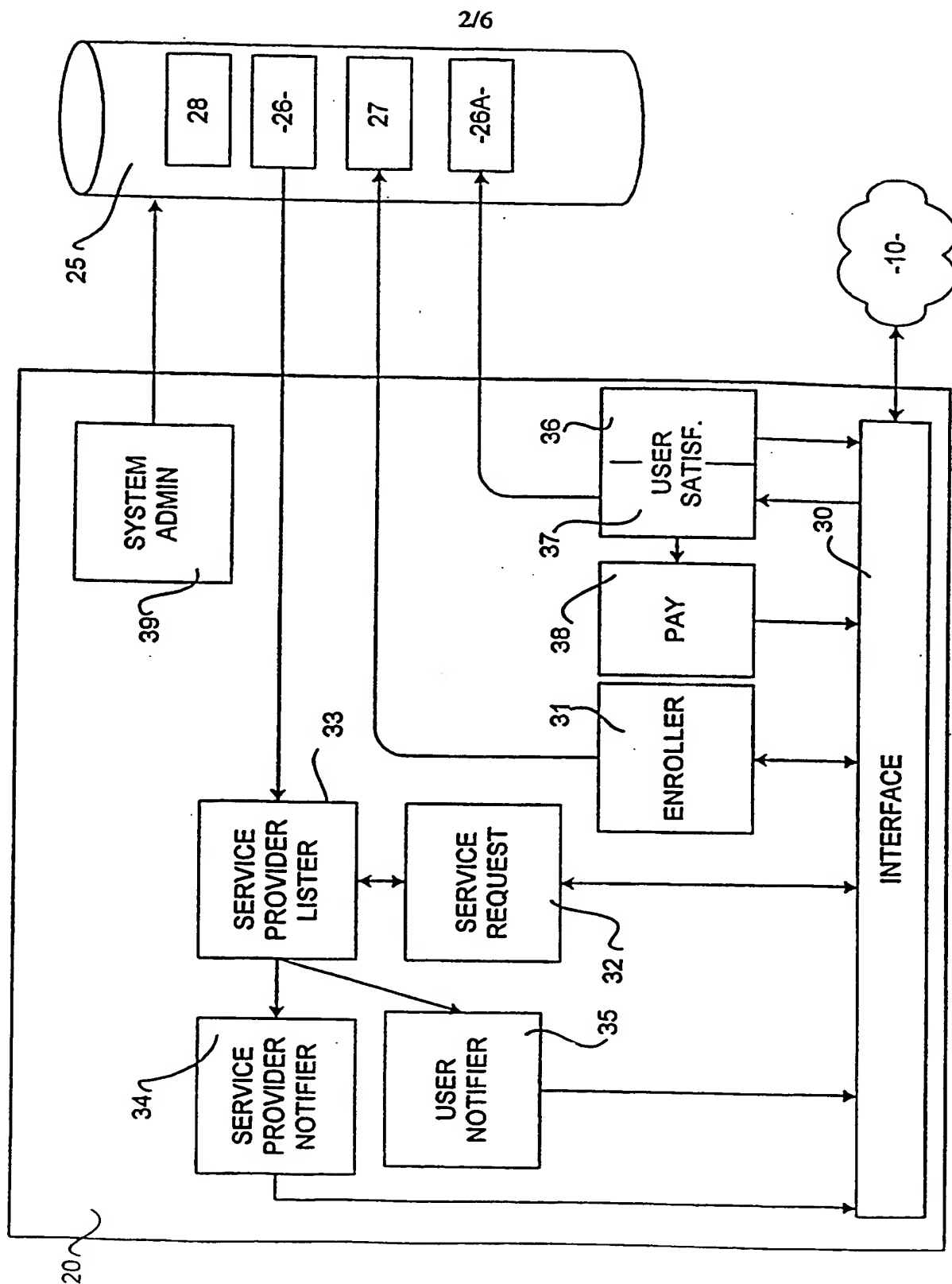
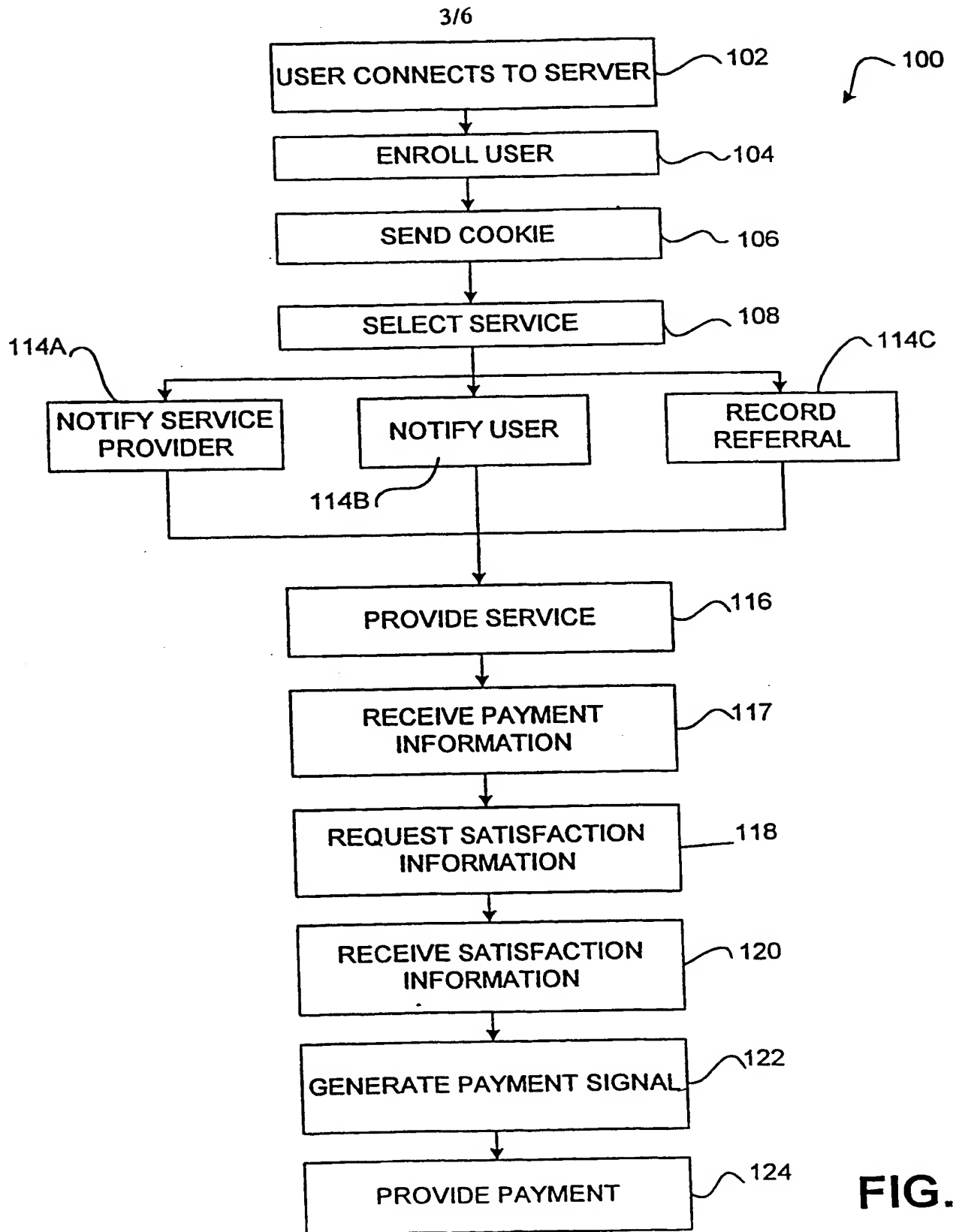


FIG. 2

**FIG. 3**

4/6

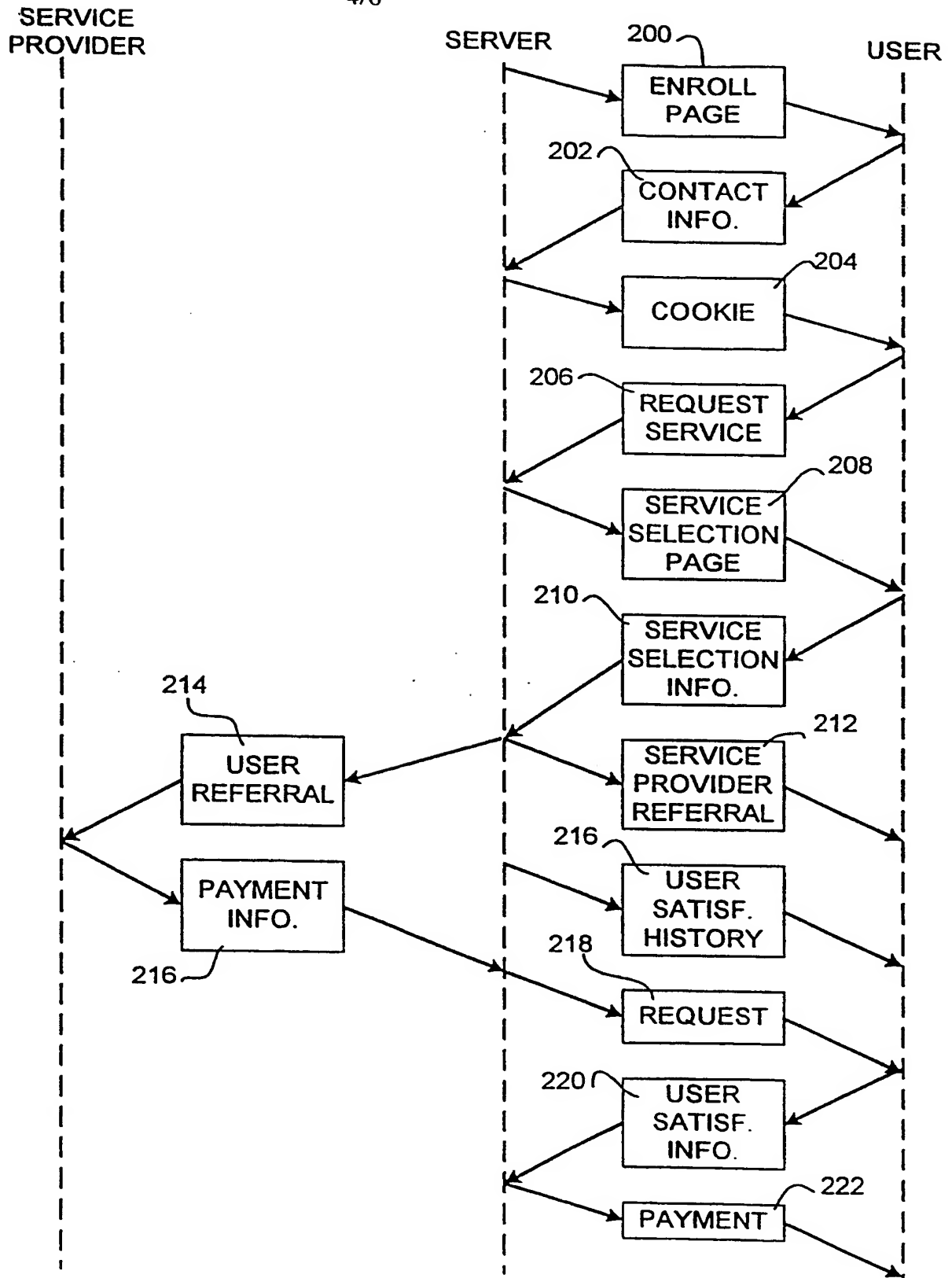


FIG. 4

5/6

SERVICE REQUEST FORM

1. CHOOSE ONE REQUIRED SERVICE:

302 CATEGORY #1 ▼

CATEGORY #2 ▼

CATEGORY #3 ▼

CATEGORY #N ▼

301 304 305

2. GIVE DETAILS OF YOUR REQUIREMENTS:

306

DETAILS:

3. TIMING:

308

URGENCY	DAY	TIME OF DAY
<input type="radio"/> EMERGENCY	<input checked="" type="radio"/> ANY DAY	<input checked="" type="radio"/> ANY TIME
<input type="radio"/> 1 DAY	<input type="radio"/> WEEKDAY ONLY	<input type="radio"/> 9 A.M.-5 P.M.
<input type="radio"/> 2-5 DAYS	<input type="radio"/> WEEKEND ONLY	<input type="radio"/> AFTER 5 P.M.
<input type="radio"/> 1 WEEK	<input type="radio"/> SPECIFIC DAYS	<input type="radio"/> SPECIFIC TIMES
<input checked="" type="radio"/> A FEW WEEKS		

4. LOCATION WHERE SERVICES TO BE PROVIDED:

314 310

312A ☒ MY ADDRESS

312B ☐ SERVICE ADDRESS

312C ☐ PROVIDER'S PREMISES

312D ☐ OTHER - (SPECIFY)

APT: NUMBER:

STREET:

CITY:

STATE: ZIP:

5. CONTACT INFORMATION:

318

NAME:

TEL:

CELL:

FAX:

E-MAIL:

320 SUBMIT RESET TO HOME PAGE HELP

FIG. 5

SERVICE QUESTIONNAIRE FORM

WE RECENTLY REFERRED YOU TO THE SERVICE PROVIDER(S) LISTED BELOW FOR {NATURE OF REQUEST} TO ENABLE US TO BILL THE SERVICE PROVIDER AND TO PROVIDE YOU WITH A 5% CREDIT YOU MUST ANSWER ALL OF THE FOLLOWING QUESTIONS AND THEN CLICK THE "SUBMIT" BUTTON AT THE BOTTOM OF THIS PAGE

SERVICE STATUS - COMPLETED ☒ CANCELLED ☐ POSTPONED ☐

SERVICE PROVIDER ▼

DATE SERVICE COMPLETED: ▼

INVOICE #

TOTAL AMOUNT OF INVOICE (INCLUDING TAXES) \$

RATE EACH OF THE FOLLOWING ASPECTS OF THE SERVICE BY CLICKING ON THE APPROPRIATE BUTTON.
1=WORST 5=BEST

1. QUESTION #1

1 2 3 4 5

☐ ☐ ☒ ☐ ☐

2. QUESTION #2

1 2 3 4 5

☐ ☐ ☒ ☐ ☐

...
N. QUESTION #N

1 2 3 4 5

☐ ☐ ☒ ☐ ☐

OPTIONAL COMMENTS:

SUBMIT TO EARN REBATE RESET HELP

FIG. 6

THIS PAGE BLANK (USPTO)